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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,342	10/20/2003	Ludwig Busam	CM2536CQ	2901

27752 7590 01/26/2005

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
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CINCINNATI, OH 45224

EXAMINER
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LONEY, DONALD J

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/689,342

Applicant(s)

BUSAM ET AL.

Examiner

Donald Loney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/20/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I in the reply filed on November 12, 2004 is acknowledged. The traversal is on the ground(s) that the autogenously bonding does not include the use of adhesives. This is not found persuasive because the product can be formed by a materially different process such as referred to in the restriction requirement and product claims are not limited by process recitations therein.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2 and 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel et al (6171682) in view of either Swartz (4267223) or Davis et al (3839137).

Raidel et al teaches a self-bonded corrugated fiber sheet wherein the thermoformed portions (patterned fusion bonded regions) are located parallel to the corrugations in order to fix the corrugations (i.e. to provide stability thereto). Raidel et al is the US Patent that originated from WO 96/00625 discussed by the applicant on page 14, lines 13-15 of the specification. Refer to figure 11 and column 7, lines 24-34. The difference there between, as discussed by the applicant on the referred to section above, is that the applicant forms embossed heat patterns that are non-parallel to the

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corrugations. This is done by using embossing rollers as shown in figures 2C-2E and 4A-4C.

Both secondary references teach to form thermo-embossed pattern lines that run non-parallel to the corrugations in a plastic sheet for the purpose of stiffening the sheet (i.e. to provide stability thereto). Refer to figure 1 in Davis et al showing heat embossed lines 10 running transverse to the corrugation. Also refer to the Abstract and column 2, lines 3-15 and 60-67. Refer to figures 7 and 10 in Swartz showing thermo-embossed lines 77 and 77' that run transverse to the corrugations formed by the projection 70 and 70' in the roll 38. Swartz also teaches that the lines can run either parallel or transverse to the corrugations (column 1, lines 60-64).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to Raidel et al to form the heat bonded patterned line regions other than parallel to the corrugations, as taught by the secondary references, in order to stabilize the corrugations motivated by the fact the secondary references teach the bonded regions in non-parallel lines to the corrugations for the same reason as Raidel et al and the applicant (i.e. to stabilize the sheet). One would also be motivated by the fact that Swartz teaches that the lines can run in either the parallel or transverse direction to the corrugations.

4. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel et al in view of either Swartz or Davis et al as applied to claim 1, 2 and 8-13 above, and further in view of either Ives (1975548) or Tanaka et al (6506472).

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The combination of Raidel et al and either Swartz or Davis et al teaches the invention substantially as recited except for the bonding lines containing two sets of parallel bonding lines wherein one set is not parallel to the other set.

Both Ives and Tanaka et al teach to form two sets of patterned lines in a sheet wherein one is not parallel to the other. Refer to lines 5A and 5B in figures 3-6 in Tanaka et al. Refer to figures 2-4 in Ives showing embossed line patterns 16, 16' that are non-parallel to each other. The embossing roller show in figure 3 of Ives is also very similar to the applicants' embossing roll show in figures 2D and 2E.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the combination of Raidel et al and either Swartz or Davis et al to form two sets of parallel line patterns that run non-parallel to each other, as taught by the secondary references, in order to stabilize the sheet motivated by the fact that the secondary references teach this is a known type of embossed pattern in corrugated sheets and provide the same function (i.e. stabilizing the sheet).

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raidel et al in view of either Swartz or Davis et al as applied to claim 1, 2 and 8-13 above, and further in view of Easley et al (3653382).

The combination of Raidel et al and either Swartz or Davis et al teaches the invention substantially as recited except for the corrugations being deformed (i.e. flattened into a pleated type structure) as recited in claim 14 and shown by applicants' figures 4B and 4C.

Easley et al teaches to form embossed patterned lines 6 that run non-parallel to the flattened corrugations. Refer to figures 1-3 showing a flattened type structure as recited by the applicant and shown in figures 4B and 4C referred to above.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the combination of Raidel et al and either Swartz or Davis et al to deform the corrugated sheets, as taught by Easley et al, in order to form a flattened type structure (i.e. pleated) therefrom, motivated by the fact Easley et al teaches to emboss the structure with lines that run non-parallel to the flattened areas.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Donald J. Loney", with a long, sweeping horizontal stroke at the end.

Donald Loney  
Primary Examiner  
Art Unit 1772

DJL:D.Loney  
01/21/05